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Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 6691A 6600-Watt System Power Supply, 30V, 220A

The Agilent 6691A is the 0–30 V, 0–220 A member of the 6690A–6692A 6600 W-class GPIB system DC supply family. OEM documentation emphasizes low ripple and noise, accurate current programming/readback, analog control, remote sense, and protection features for continuous high-power stress environments. Intended for high-current 30 V manufacturing burn-in, telecom and industrial DUT stress, rack ATE requiring SCPI-compatible high-power DC, and systems that may later parallel multiple same-model 6691A units for more current. Intended for high-current 30 V manufacturing burn-in, telecom and industrial DUT stress, rack ATE requiring SCPI-compatible high-power DC, and systems that may later parallel multiple same-model 6691A units for more current. Single-output ~6600 W GPIB supply with industry-standard SCPI commands Analog programming and monitoring for process-control waveforms Remote sense, electronic calibration, and same-model paralleling



MODEL

HP / Agilent 6691A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

6691A

LISTING

<https://aumictechlabs.com/products/6691a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 6691A is a 6600 W DC power supply delivering 0–30 V at 0–220 A for high-demand manufacturing test, burn-in, and automated test equipment environments. It combines precise analog and programmable control with low output ripple, remote sensing, and comprehensive protection to support integration into complex multi-output test systems via GPIB and serial connectivity. Technical

Specifications Output Ratings Voltage: 0–30 V Current: 0–220 A Power: 6600 W Programming Accuracy (at 25 ±5°C) Voltage: 0.04% + 30 mV Current: 0.1% + 125 mA Readback Accuracy (front panel or GPIB, 25 ±5°C) Voltage: 0.05% + 45 mV Current: 0.1% + 165 mA Output Ripple & Noise (20 Hz–20 MHz) Voltage (RMS): 2.5 mV Voltage (peak-to-peak): 25 mV Current (constant current, load inductance >5 µH rms): 50 mA Key Features Analog voltage and current control via rear panel inputs (modulation: 0 to –5 V for voltage, 0 to +5 V for current; input impedance ≥30 kΩ) SCPI command set for instrument control Remote sensing: up to half rated voltage drop per load lead Built-in voltage and current measurements Overvoltage, overcurrent, and overtemperature protection Programmable shutdown with fast up-and-down ramp capability External TTL shutdown input and linked power supply shutdown Fan-speed control for reduced acoustic noise Error status reporting Interfaces & Control GPIB interface for local and remote operation Analog programming and monitoring via rear panel Serial link supports control of up to 16 outputs at one GPIB address using auxiliary mainframes Physical & Environmental Dimensions: 425.5 mm W × 221.5 mm H × 674.7 mm D Rack-mountable; compatible with 5000 W Agilent 6680 Series footprint Installation Category III Qualified for temperature, humidity, altitude, shock, vibration, ESD, AC line, EMC, and RFI environments

6691A Characteristics / Specifications

PARAMETER	VALUE
Output voltage rating	0 to 30 V
Output current rating	0 to 220 A (derated linearly 1%/°C from 40 to 55 °C)
Constant voltage ripple and noise rms 20 Hz to 20 MHz	2.5 mV
Constant voltage ripple and noise peak to peak 20 Hz to 20 MHz	25 mV
Constant current ripple and noise rms	50 mA (load inductance greater than 5 μ H)
Voltage load regulation	0.002% + 1.1 mV
Current load regulation	0.005% + 17 mA
Voltage line regulation	0.002% + 650 μ V
Current line regulation	0.005% + 17 mA
Transient response time	less than 900 μ s to within 150 mV for rated current half-step
DC floating voltage	$\pm$ 60 VDC from chassis ground
Remote sensing	up to half rated output voltage drop per load lead
Command processing time	20 ms average after GPIB data
Analog programming voltage input	0 to -5 V
Analog programming current input	0 to +5 V
Analog programming input impedance	30 k Ω or greater
AC input frequency	47 to 63 Hz
AC input Option 2	180 to 235 VAC 3 phase
AC input Option 4	360 to 440 VAC 3 phase
Input power maximum	9000 VA and 7950 W
No load input power	175 W
Average programming resolution voltage	8.1 mV
Average programming resolution current	59 mA
Full load programming rise or fall time 10% to 90%	60 ms

PARAMETER	VALUE
Dimensions	425.5 mm W × 221.5 mm H × 674.7 mmD Notes Numeric values are from the Agilent 6690A–6692A System DC Power Supply data sheet. Current derating above 40 °C follows the OEM 1%/°C rule.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Output voltage rating: 0 to 30 V

Output current rating: 0 to 220 A (derated linearly 1%/°C from 40 to 55 °C)

Voltage programming accuracy at 25 ±5 °C: 0.04% + 30 mV

Current programming accuracy at 25 ±5 °C: 0.1% + 125 mA

Constant voltage ripple and noise rms 20 Hz to 20 MHz: 2.5 mV

Constant voltage ripple and noise peak to peak 20 Hz to 20 MHz: 25 mV

Constant current ripple and noise rms: 50 mA (load inductance greater than 5 µH)

Voltage readback accuracy at 25 ±5 °C: 0.05% + 45 mV

Current readback accuracy at 25 ±5 °C: 0.1% + 165 mA

Specifications

PARAMETER	VALUE
Voltage load regulation	0.002% + 1.1 mV
Current load regulation	0.005% + 17 mA
Voltage line regulation	0.002% + 650 µV
Current line regulation	0.005% + 17 mA
Transient response time	less than 900 µs to within 150 mV for rated current half-step
DC floating voltage	±60 VDC from chassis ground
Remote sensing	up to half rated output voltage drop per load lead
Command processing time	20 ms average after GPIB data
Analog programming voltage input	0 to -5 V
Analog programming current input	0 to +5 V
Analog programming input impedance	30 kΩ or greater
AC input frequency	47 to 63 Hz
AC input Option 208	180 to 235 VAC 3 phase
AC input Option 400	360 to 440 VAC 3 phase
Input power maximum	9000 VA and 7950 W
No load input power	175 W
Average programming resolution voltage	8.1 mV
Average programming resolution current	59 mA

Full load programming rise or fall time 10% to 90%: 60 ms

Dimensions: 425.5 mm W × 221.5 mm H × 674.7 mmD Notes

Numeric values are from the Agilent 6690A-6692A System DC Power Supply data sheet. Current derating above 40 °C follows the OEM 1%/°C rule.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: **sales@aumictech.com** · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.